

# AtScale Cube Design Concepts

This section explains the data modeling concepts associated with creating AtScale virtual cubes.



AtScale does not recommend modeling on a cube with two or more users concurrently. Modeling on the cube designer canvas with two or more users concurrently can result in undesired behavior and a loss of completed work.

- ▶ [About AtScale Virtual Cubes](#) An AtScale virtual cube is a metadata layer that overlays a multi-dimensional cube format on top of the datasets stored in a connected data warehouse, such as Google BigQuery or a Hadoop cluster. The cube is virtual because the data is not moved or processed up front. Instead, the cube contains the logic about how to process and optimize the data at query runtime.
- ▶ [About Star Schema Data Modeling](#) A star (or snowflake) schema refers to a way of organizing data in a relational database in order to support OLAP queries. AtScale's virtual cubes rely on star schema data modeling concepts.
- ▶ [About Measures and Dimensions](#) In business intelligence (BI) tools such as Tableau or Excel, data plays one of two major roles in an analysis: dimension or measure. An AtScale virtual cube describes the underlying data in the connected data warehouse as dimensions and measures so that BI tools can work with this data more easily.